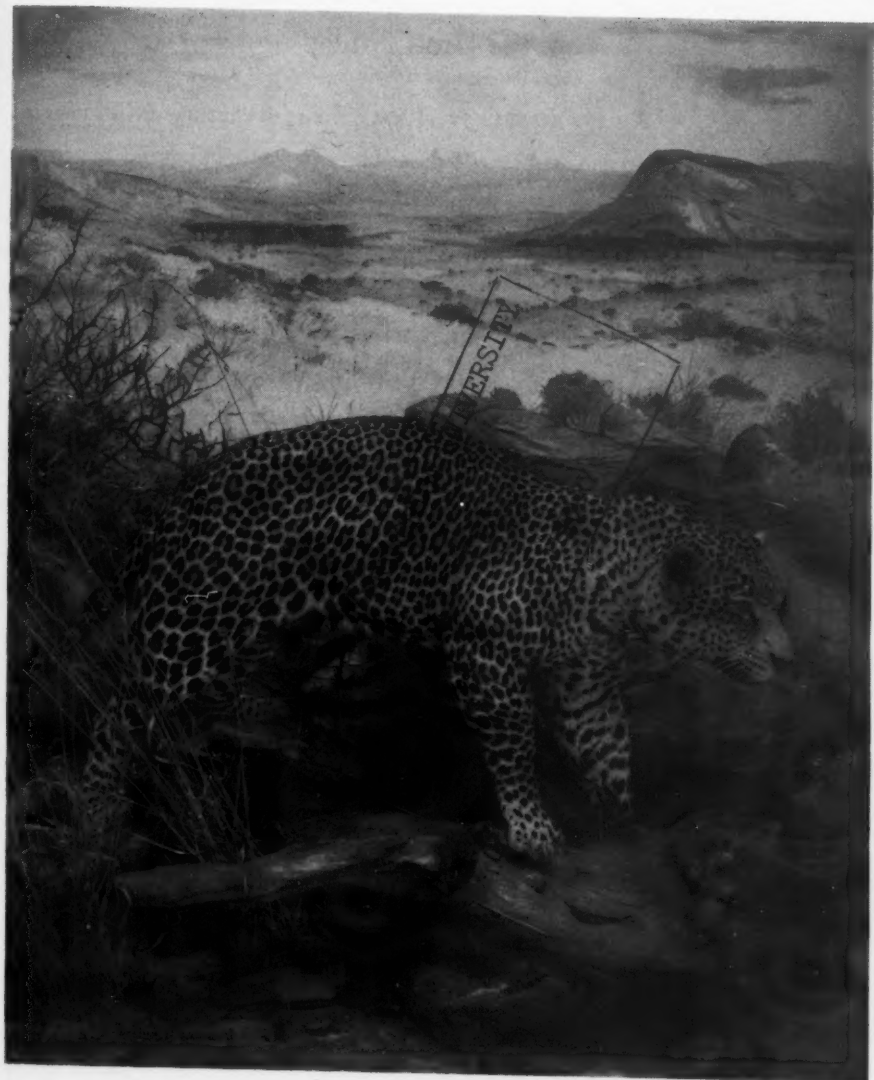


CARNEGIE

MAGAZINE

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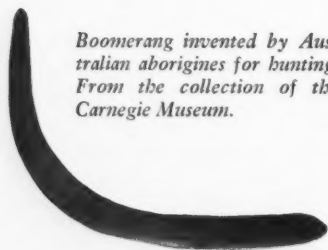


February 1961

AUSTRALIAN ABORIGINE ECONOMY

in the 17th Century

IN ITS SIMPLEST TERMS, the 17th century civilization of Australia's aborigines can, at best, be described as a "collecting and hunting" economy. Tribal units wandered in the vast wilderness seeking food.



Boomerang invented by Australian aborigines for hunting. From the collection of the Carnegie Museum.

With pointed wooden staffs for digging, women and children gathered seeds, lily roots, stems, yams, berries and fruits. There was no cultivation of the soil. Aborigine men hunted and killed birds and larger animals with crude weapons. There was no system of preserving food and the tribe starved in times of scarcity.

The aborigines never developed a need for money or any basic unit of trade. They wore no clothes, never learned to weave, lived in *lean-to's*. Their entire life was simply arranged to fulfill their basic wants, to survive.

When you realize how basic an economy supported the aborigines, you can well see why no advanced monetary system arose in this simple civilization. But, today, the complexity of our lives, our high living standards, our tightly interwoven system of business, depend on our monetary system and modern banking services to serve the financial needs of our society.

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Tuesdays to 10:00 P.M.

Sundays 2:00 to 5:00 P.M.

CARNEGIE LIBRARY OF PITTSBURGH 4400 Forbes Avenue, Pittsburgh

Weekdays 9:00 A.M. to 9:00 P.M.

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CAFETERIA OPEN FOR VISITORS TO THE BUILDING

Luncheon 11:00 A.M. to 2:00 P.M., weekdays

Snacks 2:00 to 4:00 P.M., weekdays

Dinner 4:30 to 7:00 P.M., Tuesdays and Thursdays

COVER

Leopard (*Panthera pardus*), a male from British East Africa, was collected by Childs Frick. With three other mammals (see pages 56-57) mounted nearly a half century ago by R. H. Santens, it now has been given a new setting by Ottmar F. von Fuehrer, and may be seen in Mammal Hall at Carnegie Museum. The leopard, most widely distributed of the big cats, is, or was until recent years, found throughout Africa and most of Asia.

CARNEGIE MAGAZINE dedicated to literature, science, art, and music, is published monthly (except July and August) at 4400 Forbes Avenue, Pittsburgh 13, Pennsylvania, in behalf of Carnegie Institute and Carnegie Library of Pittsburgh. James M. Bovard, editor; Jeanette F. Seneff, associate editor; Dorothy E. Teckmeyer, assistant editor; Melva Z. Bodel, advertising manager. Telephone MAYflower 1-7300. Volume XXXV, Number 2, February 1961. Permission to reprint articles will be granted on request. Copies regularly sent to members of Carnegie Institute Society. Subscriptions outside Allegheny County \$2.00 a year.

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FEBRUARY CALENDAR

PAINTINGS FROM ALBRIGHT GALLERY

Twenty-nine paintings by nineteenth- and twentieth-century artists continue on exhibit through February 19. These are loaned by the Albright Art Gallery, of Buffalo, New York.

FINE ARTS LECTURE SERIES

The third free lecture is announced on page 45: "The Coming Discovery of Chinese Painting."

EGON SCHIELE

Paintings by Egon Schiele (Austrian, 1890-1918) will be seen in four second-floor galleries from March 3 through April 2, an exhibition organized by the Institute of Contemporary Art at Boston.

FROM THE PRINT COLLECTION

Paintings and drawings by Paul Klee owned by collectors who live in Pittsburgh will be shown in gallery J from February 13 through March 19.

These follow Japanese color prints from the Institute collection, exhibited through the 12th.

LOCAL ARTIST SERIES

Painting and sculpture by Robert L. Lepper, professor of design at Carnegie Institute of Technology, continue in gallery K through February 26.

TREASURE ROOM

Ecclesiastic Art, twelfth to seventeenth centuries, western Europe: religious carvings in wood, ivory, and alabaster, croziers, portable altar; miniatures from liturgical books, embroidered church vestments. Carnegie Institute collection.

COMPOSERS FORUMS

Elliott Carter will discuss musical composition at a recital of his works (page 47). Wilfrid Mellers and Walter Piston will be here later, and the series has included Ned Rorem and Easley Blackwood.

SUNDAY ORGAN RECITALS

Marshall Bidwell presents a recital on the great organ of Music Hall each Sunday at 3:00 P.M. Programs are sponsored by Arbuckle-Jamison Foundation.

February 5, Ray Martin will be guest to play César Franck's *Symphonic Variations* with Dr. Bidwell. On the 12th, Gary Lewis will perform Beethoven's *Concerto No. 1*; on the 19th, Franz Liszt's *Fantasia on Hungarian Melodies* will be the feature with Paul Walter at the piano and Dr. Bidwell at the organ console.

CARNEGIE INSTITUTE SOCIETY LECTURES

Mondays, Mt. Lebanon Auditorium, 6:30, 8:30 P.M.
Tuesdays, Carnegie Music Hall, 2:30, 6:30, 8:30 P.M.
Admission by membership card

February, 6, 7—SPAIN

Karl Robinson shows major areas of this cultural empire and includes many human-interest scenes.

February 13, 14—POLAND

Kenneth Richter goes behind the Iron Curtain for landscape, people, agriculture, and industry.

February 20, 21—OLD WYOMING

(Harmony Dairy Co., sponsor)

Alfred M. Bailey depicts transformation of glorious Wyoming through the seasons of the year.

February 27, 28—THE CHANGING HEART OF AFRICA

Arthur C. Twomey spent three months this summer in Kenya, Uganda, and Tanganyika on a scientific expedition, when this film was made.

FROM SOUTH AFRICA

Ancient and modern wood carvings and tribal beadwork collected by Mrs. Andrew E. Sloan on a trip to South Africa have been lent for display this month in the Library corridor at the park entrance.

HOBBY HALL

Lighting devices from classical times to colonial America, a recent gift of Arthur B. Van Buskirk, will be on display this month. These are in addition to dolls representing the presidents and first ladies, a group of German bisque dolls, and models of homes around the world. Hobby Hall is on the third floor.

NATURE CONTEST

Study lists to be used in connection with exhibits at Carnegie Museum will be mailed by the Division of Education this month to all City and County schools. This is in preparation for twenty-ninth annual Nature Contest to be held April 8.

STORY HOUR

Preschool story hour (3 to 5 years) at 10:30 A.M. on Tuesdays, February 7 and 21. Talks by staff members for mothers during the half-hour period.

Story hour (5 to 12 years) continues regularly at the Library each Saturday at 2:15 P.M.

HOPI INDIANS

Free program of Hopi dances and ceremonials, arts and crafts in Music Hall February 11, sponsored by Mr. and Mrs. Henry J. Heinz II. See page 55.

TRIBAL MEDICINE IN LIBERIA

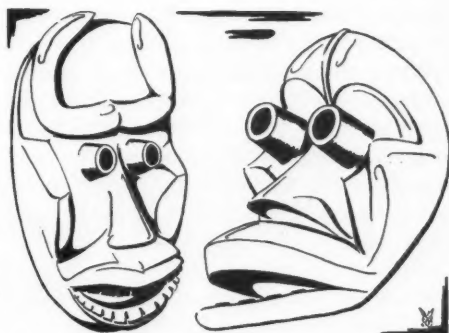
RICHARD M. FOX

LIKE everything else the primitive tribesman does, his methods of dealing with sickness are governed by tradition. While a given custom may seem superficial or unnecessary, each is nonetheless an essential part of the complex, interrelated barrier the tribe has painstakingly erected between itself and disaster.

Tribal man is taught from earliest infancy how to behave in every foreseeable circumstance. Because the deviant who flouts tradition is likely to harm the tribe as a whole as well as himself, the individualist is punished. Tribal traditions are in fact the practical devices for coping with a mysterious and potentially hostile environment, developed logically through the collective experience of generations of intelligent if unlettered people.

Tribal organization in Liberia is centered around the family unit. Discipline is maintained through three branches of government. The visitor is at once aware of the administrative branch in the person of the chief, with his retinue of assistants and hangers-on (the bureaucrats). A legislative-judicial branch is unobtrusive save in crises: the elders of the tribe, whose collective views and decisions reconcile a current situation with folk tradition, and who interpret the law and define policy for the chief. A third governmental branch is the priesthood of the Poro—the secret, highly ritualistic, tribal religion. Their influence is tremendous, their authority absolute; the chief himself submits to the Poro and indeed holds his office permissively.

The Poro structure includes a series of degrees, somewhat like Masonic orders. Initiation rites at puberty mark the youth's ad-



LIBERIAN SPIRIT MASKS: BAŊ GEH (left) IS THE BLACKSMITH'S GUARDIAN; ZAW GEH, A HEALER

mittance into this organization. Throughout his life he will slowly rise through the "degrees" in proportion to his diligence, application, and sense of responsibility. Thus each physically adult male in the tribe has his place in the pyramid of the Poro.

Somewhere in the upper echelons of this hierarchy is the *zo*. The white man refers to him as the "witch doctor" or the "medicine man." Each phrase is partly apt, but both mislead in that they carry overtones of contempt. The word *zo*, found in the languages of all the tribes I visited, means literally "a very learned person worthy of respect," and denotes particularly the tribal physician-priest.

Each village has a practicing *zo*. In a large town there will be one in each quarter, just as there will be a quarter chief with administrative authority for that part of town. At Zorzor, a large town in the Loma country of north central Liberia having such an organization into quarters, the head *zo* received me in his hut a number of times. During our first sessions we were alone except

for his assistant and my interpreter. At subsequent conferences, various other local practitioners were present. Their almost feudal respect for my host was obvious. Interesting also is the fact that his hut was located with its front door opening on the "palavar ground," a kind of town square, while its back door—through which I did not pass, of course—opened on the high-fenced "devil bush," the Poro temple. From this it seemed probable that this *zo* functioned as temple guardian, in addition to his functions as a healer.

A woman may also be a *zo*. I did not learn what, if any, priestly function is attached to the office of *mazo* (*ma* is Bassa for "woman"). In the healing arts she is in charge of "woman-part medicine" and thus is midwife, obstetrician, pediatrician, and specialist in female disorders. These areas of practice are, incidentally, denied male *zo*'s, who may not, for example, be present at a delivery.

Every once in a while a boy or girl newly initiated into the Poro is selected to receive special additional training as a *zo*. Presumably the priesthood decides which few of each generation of young tribal people shall eventually occupy the lofty status of *zo*. The apprentice is given special instruction in the traditional materia medica and related matters, as well as the standard training that is the purpose of the initiation "bush school."

Dr. Fox is associate curator of insects and spiders at Carnegie Museum. He has returned from Africa rather recently, where he spent five years as medical entomologist and acting director of the Liberian Institute for Tropical Medicine. After this he spent another year in Liberia, 1958, studying tribal remedies in a search for new drugs for Riker Laboratories, Inc., of California, with considerable success. Dr. Fox's article with his own illustrations seems a natural result of his inheritance as son of a medical doctor and a teacher of art. He holds degrees from the Universities of Pennsylvania and of Pittsburgh.

In due course the young apprentice becomes an assistant to a practicing *zo*, in which capacity his training is continued, sometimes for years, at a practical level. Probably the apprentices are selected only as needed in order to ensure the continuity of the profession without overcrowding it.

Apparently the *zo*'s have a kind of tribal A.M.A. A Bassa *zo* who had been exceptionally cooperative once told me he had attended a meeting of *zo*'s, where he learned of some new remedies which he thought I ought to hear about.

The curative properties of a medicine do not depend, according to tribal thinking, upon its chemical make-up or upon its physiological activity. A cure is effected because of inherent magical traits acquired by medicine by virtue of the personal prowess of the doctor who gathered and compounded the ingredients—all according to ritual—and by virtue of the essential spiritual nature of each component. Accordingly, only a *zo* can make truly effective medicine.

Our word "medicine" is another incomplete approximation of the tribal concept. The English word specifies a substance used only to counteract disease; disease we understand to be physical maladjustment resulting from parasitic invasion of the body or from physiological malfunction, or both. The tribal man uses "medicine" to restore physical health, it is true. But to him an even more important use is to ward off misfortune, whether caused by blind luck or by evil spirits. Tribal man will expect the *zo* to give him medicine to cure his sore back or his bad cold or his smallpox. Equally, he will expect to obtain medicine to ensure his wife's faithfulness, to protect him from evil during a journey, to keep birds from raiding his newly planted rice field, or to avoid excessive taxation. The tribal concept we translate as "medicine" thus embraces our



THE ZO USES A LEAF FUNNEL TO TREAT AN EYE CONDITION

ideas expressed as "fetish" and "charm," as well as "drug."

The tribal man has a practical working knowledge of gross anatomy and a reasonable understanding of basic functions. Microorganisms are beyond his ken; it has never occurred to him that such things might exist. Physiological disturbances are familiar phenomena, but he does not seek and has no reason or basis for seeking a chemical explanation. Nutritional questions resolve quite simply to the problem of filling his belly: food is food, and he eats what he has when he has it. The causal relationship between vitamin deficiency and difficulties with his vision seems to him both unlikely and illogical. Sickness has an obvious explanation—it is the consequence of evil influence. A sick person has been "witched," that is, an evil magical influence has been projected into him.

If the culpable evil comes from a human contemporary, usually this is regarded as

accidental and not because the "witch" bears ill will toward the afflicted person. Pin-in-doll voodoo is all but unknown in Liberia. Ancestral spirits, offended by incorrect or sloppy ritual, may "witch" a person to teach him a lesson or to punish him. Certain animals are evil and are able to visit their influence upon the unwary; this is true also of certain plants and of certain types of inanimate objects. But sickness is only one kind of evil-induced disaster. A mishap or an accident of any sort, a wife who bestows her favors on others without suitable permission, termites in the woodwork, or a poor crop yield likewise result from evil influences.

I once spent an evening in a tribal village, acting as the "judge" of a case involving "witching," at the request of my Bassa cook and his family. My cook's baby boy had died suddenly from undetermined causes. The baby's hysterical mother accused her brother-in-law of witching the child and

thus causing his death; she wanted the man punished. It was a spine-tingling experience.

We speak of the practice of medicine as including the Art and the Science. The *zo* appreciates these things. Magic and ritual are the bedside manner, helping to gain the patient's confidence and to reassure him. A medicine has something of the status of a sacrament to tribal people and must be administered accordingly. For the *zo*, the body of medical science is his knowledge of the properties and applications of the plant ingredients available to him, his knowledge of the kinds of evil influences that may harry his patient, and his understanding of correct procedures for compounding and administering his medicines.

In a philosophically animistic society, it is natural to learn that everything has a soul or spirit and that the influence for good or evil exerted by a spirit varies with its possessor. Some things emanate very, very evil influences, while others are weakly neutral, and still others emit very, very good influences. In general, the strongest influences of all are exerted by ancestral spirits; the spirits of persons who were dynamic and influential while alive are most to be reckoned with. The complex usages and rituals of the Poro apparently are designed to prevent, contain, or counteract the problems created for the living by the dead, as well as to enlist the aid of the wise departed for assistance in daily matters. Animals can be powerful. The leopard is dangerous dead or alive, as is the elephant; but sheep and chickens have a rather neutral influence. Plants are capable of exerting influences; both beneficial and toxic plants are considered to be very strong. Inanimate things are weak in spirit unless they happen to be occupied temporarily by the spirit of some other, stronger thing. The ritual mask, for example, is only a piece of wood; as such it

is nothing. But it has been occupied by the spirit of the ancestor whose likeness it represents, and this makes it exceedingly strong.

A Swiss national in charge of a store on the Firestone Plantation once brought me an example of a strong medicine. It is a little polished black horn, an inch and a half long, from the "water deer," a tiny local antelope. The hollow interior is filled with pulverized plant material. The open end of the horn is covered by a cunningly woven cap made to fit so snugly that I had to cut it away to examine the contents. My Swiss friend told me it had been found on the floor of the store at closing time and that his native helpers refused to touch it. He and they believed it had been left there deliberately by a disgruntled customer to bring evil on the store—perhaps in revenge for rising prices or for a fancied slight. While such may have been the case, I rather believe it was a personal fetish dropped by accident. Nearly all tribal people wear "medicine" on a neck string as a general protection against harm—something like a holy medal.

In sum, the ingredients used for medicines usually are of plant origin. Extracts are common and may be made from leaf, stem, bark, root, or flower. More rarely, plant material will be collected at a particularly propitious time by the *zo* and stored under his thatch to dry, later to be used in powdered form. Plant materials may be combined with ingredients of animal origin when especial strength is needed, but animal materials are more likely to be found in pure "witch" medicines than in "sick" medicines. Pebbles are used rarely. Earth, especially fine clay, serves principally as the matrix for more potent materials.

All natural body orifices are used as routes for administering medicine. The orifice nearest to or leading most directly to the seat

Department of Fine Arts
WINTER LECTURE SERIES

Free to the Public

CARNEGIE LECTURE HALL
Wednesday, February 15, 8:00 P.M.

DR. JAMES FRANCIS CAHILL

Assistant in Chinese Art
Freer Gallery of Art
Washington, D. C.

THE COMING DISCOVERY OF
CHINESE PAINTING

of the trouble is normally employed. Thus an eye condition would be treated by applying medicine directly on the eyeballs, a stomach-ache by having the patient drink a prepared beverage, constipation and certain other internal disorders by enema, a mental disturbance via the ear or nose. For respiratory conditions, the patient is made to inhale steam and fumes given off by a pot of cooking herbs.

There are three levels of medicines.

The lowest level, to which is attached the least importance and little secrecy, is the "home remedy." These are cures of common knowledge that may be used by any householder. Most people in a village have remedies for the common cold, fever, stomach-ache, diarrhea and constipation, as well as some medicines (like our horseshoe over the door) to avert general evil influences. Sickness treated successfully by home remedies probably would have cleared up in a few days without medication. Unless the home remedy inadvertently happens to be harmful, it will seem to be effective.

These remedies are almost always plant leaves or roots, sometimes taken internally, but frequently mixed with clay and smeared on the body.

The second level is the materia medica of the *zo*, a trained professional. It is dispensed for a fee and cannot be duplicated except by another professional. This is the equivalent to Western medicine, and supplies the major system of treatment for disease. Many remedies of the *zo*'s are effective. "Folk medicine" has contributed many valuable drugs to our own medical resources.

The third and highest level of medicine is associated with Poro ritual. Essentially religious in its implications, it is surrounded by great secrecy and is held in the highest esteem. During my work in Liberia I always tried to make clear to my prospective informants that I had no desire to learn Poro secrets and had no interest in this kind of medicine; it is doubtful that any stranger could learn them anyway. As time passed, however, I formed an impression of the nature of the medicines used at Poro level, without having ever been told anything specific.

Medicines are used in connection with animal sacrifices, for example. I once came upon a great hollow tree in a forest and judged it to be a Poro altar. I noted white chicken feathers, extensive blood stains, and some overlying greenish-brown stains probably made by a plant juice of some sort. I made no detailed examination of the site and retreated at once from the area, realizing that I had stumbled upon a sacred place forbidden the eyes of the uninitiated.

The local head priest was waiting for me a few hundred yards up the trail (How did he know his sanctuary was being violated?) and hauled me before the chief. Fortunately this chief considered me his great and good friend. In the old days such a desecration

would have been punished with slavery or death. Changing times have come to the forest, however. The chief accepted my apology and remained cooperative and friendly throughout the residual three years of my stay in Liberia. The old priest, however, would never have anything to do with me and would retire muttering to his hut whenever I visited the village.

Trials by ordeal belong to the Poro level of medicine, though these trials are conducted publicly by the *zo* and the chief. As is well known, the ordeal is intended to establish guilt or innocence in an accused through mystical intervention; they were employed for this purpose by our own ancestors not so very long ago.

It has long been suspected that the tribal trial by ordeal is controlled and follows a prearranged script. Dr. George W. Harley, for many years a medical missionary in the Liberian hinterland, has explained in some of his writings how the secret judgment of the elders is enforced through the trial by sasswood. It is of interest to note that control of the results of the trial is possible because the *zo* understands the workings of the extract of sasswood bark on the human system, essentially a scientific matter. An extract of moderate concentration is highly toxic, but a stronger extract acts immediately as an emetic and thus prevents the poison from being absorbed. If the elders have decided that the accused is innocent, the *zo* prepares a very strong extract for him to drink; if he has been adjudged guilty, he gets the weaker, fatal dose.

The sasswood tree (*Erythrophloeum guineense*) is venerated by tribal people, who attribute to it the ability to recognize right and wrong, along with the power to punish transgressors.

I once had occasion to observe for myself the worship of this tree. Wanting samples of

the leaves and bark of the sasswood, I had my two Bassa assistants locate a specimen we could visit without attracting attention. They took me to a tree growing in the midst of an unfrequented swamp. As we followed a dim trail through underbrush, I noticed that Varnie and Richard occasionally picked up pebbles from the path. Reaching the tree, they stood before it in reverent attitude and in the shadowed dusk of the jungle intoned a chant in the musical Bassa language. Four times during this prayer each man rapped the tree trunk with a pebble, then threw it back over his shoulder without raising his head or eyes. The brief but rather eerie ceremony of propitiating the tree completed, they set to work in a matter-of-fact way to obtain the botanic samples I wanted. Both these young men are literate; both regard themselves as members of the civilized community, emancipated from tribal restrictions.

Tribal acceptance of Western medicine has followed a series of evolutionary steps roughly equivalent to a broad learning process in a recalcitrant but essentially bright pupil. This evolution of attitudes has been conditioned on the one hand by the fact that Liberia is in the midst of a dramatically rapid social evolution that is forcing tribal man, within a few short generations, to recapitulate and to telescope the steps toward civilization taken by our own tribes during their long, slow development from the Stone Age. Social evolution has been brought about by the impact, for better or for worse, of a gradually increasing number of diverse Westerners: missionaries, traders, physicians, businessmen, adventurers, or dere-lics. It has been greatly accelerated during the past decade by improvements in communications in the form of motor roads and the automobile, of airstrips and scheduled air lines. On the other hand, Western medi-

cine itself has undergone rapid changes during the several generations it has been known to the Liberian hinterland.

When missionaries first imported our medicine to the forest people, tribal reaction was to reject it. It seemed obvious that a white man could not understand or deal with evil spirits half so well as experienced, trained zo's. Furthermore, those offering medical services were also zealous evangelists, intent on destroying the Poro, polygamy, and every other normal tradition. How could the healing of such people be any more sensible than their eccentric social attitudes? For both traditional and economic reasons, the zo's fostered general distrust of the foreigners.

Penicillin and a revision of missionary programs came along at about the same time and led to the big break-through. Doctors who are primarily healers and who leave preaching to others have brought the needle. The gonococcus had scourged the West Coast of Africa since at least the days of Henry the Navigator. The disease resisted every resource of every zo and came to be accepted as an inevitable part of living. When it disappeared before the white man's injection, the power of this new magic was recognized at once as being far stronger than anything yet seen. The virtues of penicillin, both for gonorrhea and for yaws, were quickly appreciated. By logical extension, the needle should cure any and all conditions. Tribal man at present usually feels cheated if his visit to the clinic does not include a hearty stab in the upper, outer quadrant.

As matters now stand, Western medicine in Liberia is accepted in direct proportion to the degree of sympathetic understanding of tribal ways on the part of the protagonists of Western medicine and to the degree to which white doctors avoid militant evangel-

THE MUSIC OF ELLIOTT CARTER

Third in a series of five
COMPOSERS FORUMS

presented by
Fine Arts Department of Carnegie Institute
free to the public

Saturday afternoon, February 25, 3 o'clock

CARNEGIE MUSIC HALL

Remarks by Mr. Carter precede the music
and question and answer period follows

Sonata for Violincello and Piano (1948)

DONALD MCCALL, 'cello
JOAN MARSH, piano

Etudes and Fantasy for Woodwind Quartet

BERNARD GOLDBERG, flute
ARTHUR KRILOV, oboe
LOUIS PAUL, clarinet
MARK PANCEREV, bassoon

String Quartet No. 3 (1959)

(Pulitzer Award for Music—1960)

The Lenox String Quartet
PETER MARSH, violin
THEODORA MANTZ, violin
SCOTT NICKRENZ, viola
DONALD MCCALL, 'cello

• • •

Programs are made possible through combined grants from the Howard Heinz Endowment, The A. W. Mellon Educational and Charitable Trust, the University of Pittsburgh, and a Trust Fund of the Recording Industries obtained through cooperation of Local 60, American Federation of Musicians.

ism. Also affecting the picture is the distance to the nearest clinic or hospital. Where medical facilities exist, they are well patronized by the local population; in remote areas the tribal people still must put faith in the zo.

AN ARTIST SPEAKS

GRACE HARTIGAN

IT is not unusual for contemporary art—and particularly the kind of contemporary art with which I am identified, so-called “abstract expressionism”—to be described as lunatic or childish, or, at best, chaotic. This, of course, implies that the creators of this art, the artists themselves, are lunatics or children; or at best that they are confused and don’t know what they are about.

I don’t think I need overemphasize the fact that the artists with whom I have associated for the last ten years are extremely sincere, intelligent people. Moreover, if we tend to value in the human spirit such qualities as courage, these artists are almost without precedent in their willingness to face unknowns, to look at a blank canvas as though they had never seen a canvas before, and to descend deliberately into chaos over and over again to find their form.

But the question comes up: What are we saying? Is the artist’s voice a personal protest, or a reflection of his time, or a scream as in a nightmare? Should we ask more of our artists than we ask of our own civilization—our own culture that has been characterized as materialistic and temporal, a “tin can” culture where everything is geared for the moment, everything made is to be used and almost immediately discarded. After the war I worked as a draftsman for a match company, and one of their continual headaches was buying up the inventions of various men who persisted in finding a way to make a match that could be lit over and over again.

Should we ask, in this kind of world, that the artist’s expression be permanent, ordered, thoughtful, and with a feeling of hope and triumph?

Yes, I think we should. I think it is the artist’s responsibility—and sometimes his burden—to give to the world beauty and enlightenment. May I repeat this? I think it is the purpose of art to beautify and enlighten. If the artist is only expressing himself, then this is self-expression, the pastime of children and the mentally ill, and sometimes the release of overworked businessmen and housewives.

But self-expression is not art. Art must convey meaning to many people. It must be of the world, and more than the world. It can and must move the emotions and instruct the intelligence.

The last fifteen years have seen in painting the first radical change in plastic form since cubism. This change or discovery is of deep meaning and importance to artists, and of no value whatsoever to the outside world unless the revolution in form is accompanied by a revelation in content. I believe the work of such artists as Jackson Pollock, Willem de Kooning, Clifford Still, Philip Guston, and Mark Rothko, to name a few, expresses not only new forms but new meaning.

Grace Hartigan was visiting Buhl lecturer at Chatham College last fall and taught for two weeks in the art studio. This article is a transcription of her lecture in college chapel. Pittsburghers can see her work in *Orange Field*, in the Carnegie Institute collection, and *New England, October*, currently shown at the Institute among paintings from the Albright Art Gallery in Buffalo.

Born in Newark, New Jersey, Miss Hartigan is now living in Baltimore, Maryland. Her first one-man show was in New York City in 1951, and her paintings have been exhibited in many European centers as well as India and Japan.



ORANGE FIELD BY GRACE HARTIGAN
Oil, 83 x 52 inches
Carnegie Institute Collection
Gift of James I. Merrill

I have been told and have read that the public is confused and believes itself duped by the newest expressions in painting. And to quote Alfred North Whitehead, "We now come to the notion of 'proof.'" The thesis that I am developing conceives proof in the strict sense of that term as a feeble, second-rate procedure.

When the word "proof" has been written, the next notion to enter the mind is "half-

heartedness"—unless proof has produced self-evidence and thereby rendered itself unnecessary. It has issued in a second-rate state of mind, producing action devoid of understanding. Self-evidence is the basic fact on which all greatness supports itself. It follows that art, in any proper sense of the term, cannot be proved, for proof is based on abstraction. Art is either self-evident or it is not art.

I am going to risk a second-rate state of mind, however, by mentioning to you, first of all, what are in my opinion some of the plastic discoveries in abstract expressionism.

We have found how to construct a painting that has volume, without using chiaroscuro or planes.

We have found how to construct a painting in space without the use of "foreground" or "background."

Both so-called "positive" and "negative" space exist with fullness and meaning.

We have found how to paint "out" instead of "in," which results in a completely new use of the surface.

To pursue further my second-rate state of mind, I am going to try to mention briefly content, which even more completely defies verbalization.

I have been asking myself recently what art is about anyhow? Even in the past, was mythological and religious art really about mythology and religion? Or was it about something else entirely—something like the state or situation of man himself and his hopes and dreams.

But then, perhaps that's not it either. Certainly in music we don't accuse Mozart or Beethoven of imitating either bird calls or babbling brooks; but neither can we pin down the content as specifically as—this

fugue expresses heroism, and this, despair.

Faulkner said the only thing worth writing about is the human heart in conflict with itself. Certainly modern painting would express that—and a lot about loneliness, and how man's emotions have been affected by living in our kind of world. And I think, more than ever, the artist uses what he knows to try to find out what he doesn't know.

But with all the public confusion and misunderstanding, I have seen, in the last ten years, an extraordinary thing happen in America. It is at last possible for an experimental artist to make a living selling his work; for a few "name" artists, a living comparable to that, let us say, of a public accountant or a junior executive in an insurance company. Even more important, unknown artists can sometimes scrape together enough money for the rent and food and paint and canvas.

All of this is not the result of a clever manipulation of buyers by shrewd dealers and museum directors. It is because there is enough beauty and meaning in the advanced painting of our time to speak to some people. Still, these people are too few, but they are increasing. And as their numbers increase and as the artist feels his voice is heard and that it has been understood in his own time, so I'm sure will his message become clearer, deeper, and more true.

TOURS OF THE BUILDING

Groups are welcome to tour Carnegie Institute at any time without previous arrangements.

Docents are available to conduct groups if an appointment is made ahead of time. Nonresidents of Allegheny County pay 30¢ per person for a 45-minute tour.

The second-semester 90-minute science and art tours of the Institute by fifth and seventh grades from city schools under sponsorship of the Pittsburgh Board of Public Education start February 13 with Allen School and Allderdice Junior High.

NO FRIGATE LIKE A BOOK

Books at Carnegie Library to enhance the Carnegie Institute Society lecture series

HOME TO POLAND, CHRISTINE HOTCHKISS

A Polish woman, married to an American, returns to her homeland, now Communist "with a difference."

POLISH PANORAMA, LEWITT-HIM

Good portrait of Poland in a rich collection of photographs with a descriptive narration.

PORTRAIT OF POLAND, BERNARD NEWMAN

Trips to Poland in 1957 and 1958, with details on industrial experiments and collective farms.

THE BLACK HILLS, ROBERT J. CASEY

Evocative description and history of Wyoming and South Dakota, wild and beautiful. Photos, maps.

PONY TRAILS IN WYOMING

JOHN K. ROLLINSON

Recalling his cowboy days, the author describes rugged country and hard life of the '80's and '90's.

SEVENTY MILES FROM A LEMON

HAYDIE YATES

The Yates family moved from lower Manhattan to a ranch in the Big Horn Mountains of Wyoming.

BORN FREE, JOY ADAMSON

How an Englishwoman and her game warden husband in Kenya raised a foundling lion cub and kept trust when it returned to the jungle. Photographs.

DAYS WITH ALBERT SCHWEITZER

FREDERICK FRANCK

A doctor who worked at Lambaréné writes charmingly of the people and of Congo culture and wildlife.

THE FLAME TREES OF THIKA

ELSPETH HUXLEY

Poetic description of author's childhood in Kenya, a beautiful, perilous world of nature and animal life; Kikuyu witchcraft and superstition.

—H. F.



ALCOVES SHOWING "AMERICANA: MIDWEST COLLECTORS' CHOICE" AT THE HENRY FORD MUSEUM

REPORT FROM DETROIT

*Midwest Antiques Forum sponsored by the Henry Ford Museum
with a concurrent exhibition, "Collecting Americana"*

LOWELL INNES

WHEN Thomas Nuttall was making his western journey preparatory to writing his book, quite naturally he was taken to the show place of Pittsburgh, Benjamin Bakewell's flint glass manufactory. Here is what he wrote in *A Journey of Travel into the Arkansas Territory* (1818):

I went through the flint-glass works of Mr. Bakewell, and was surprised to see the beauty of this manufacture, in the interior of the United States, in which the expensive decorations of cutting and engraving (amidst every discouragement incident to a want of taste and wealth) were carried to such perfection.

The phrase, "amidst every discouragement incident to a want of taste and wealth,"

has long plagued. During the expansion years of the nineteenth century, however, after phenomenal industrial growth and rich agricultural development had put the Midwest in the forefront economically, the phrase "lack of wealth" lost its meaning. Unfortunately this success emphasized the other phrase, "want of taste," and an erroneous impression arose that sudden wealth and lack of taste invariably go together.

Let us hope that the Henry Ford Museum under leadership of Donald A. Shelley has effectively destroyed this latter impression, particularly as applied to the Midwest. Even before the Ford Museum exhibition, AMERI-



COLONIAL ROOM IN EXHIBIT OF AMERICANA AT THE HENRY FORD MUSEUM

CANA: MIDWEST COLLECTORS' CHOICE, and the Midwest Antiques Forum—held in Detroit in November—the exhibit of TREASURED ANTIQUES at Carnegie Institute in 1959 had given museum directors from all over the country a chance to see that many Pittsburgh midwesterners not only had a feeling for the past but also were collecting with skill and discrimination.

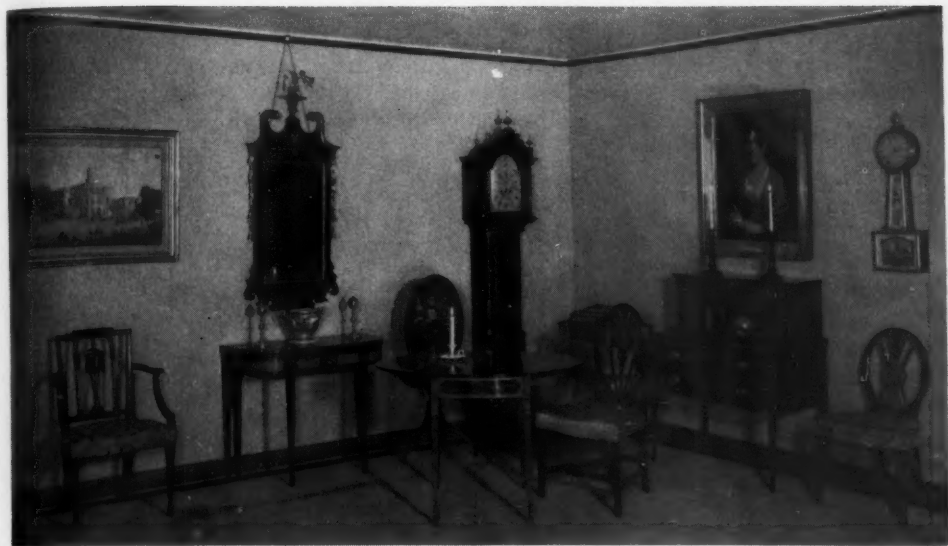
The Forum and exhibition, sponsored by and held at the Henry Ford Museum, were organized on two admirable premises: first, that collectors in the Midwest should share their possessions and knowledge; and second, that the Ford collections and Museum services would broaden and deepen understanding of our heritages, stimulate an interest in them and their use today, and sharpen collecting discrimination. The first premise was well exemplified by the exhibition; the second is going on constantly in the Museum and will be fostered by continuance of this first annual Forum.

A cross section of collectors living in the Midwest had been invited to send a few choice or typical examples for the display. Geographically they represented an area bounded on the east by Pittsburgh and Cleveland, on the south by Cincinnati and Evansville, and on the north and west by Chicago and Milwaukee. Response to the invitation to lend was heart-warming. In fact, many superb pieces never before shown came on view. (It is a real test of a collector's mettle that he be willing to risk irreplaceable items for exhibit.) The Midwest collectors met the challenge, and the Ford Museum curators displayed everything with appropriateness and sound taste. The whole show well established the connoisseurship of the Midwest.

Over one thousand items from more than eighty collectors were set up in twenty-one alcoves or settings. These triangular alcoves were arranged as on a long corridor. Each miniature room gave opportunity for all the

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HEPPLEWHITE PARLOR WITH PIECES LENT THE FORD MUSEUM BY MIDWEST COLLECTORS

period appointments, and thus monotony was avoided. The spare simplicity of the Colonial room contrasted well with Philadelphia Chippendale or finest pieces of New England cabinetmakers following traditions of the Old World, as did a room of stenciled furniture of the Pennsylvania Dutch style with a lush Victorian alcove with furniture in the Belter manner.

After traversing the rooms the visitor could walk back on the opposite side and view twenty-three museum cases of glass, china, silver, pewter, brass, iron, and wood-ware. Here were to be seen several handwoven quilts, three Chippendale chairs (New York, New England, and Philadel-

phia, for comparative study), paintings, china for the export trade, pottery.

This first Midwest Forum and exhibition did not display life in the Midwest, except incidentally. Wisely, perhaps, it was planned that the speakers, who came from varied museums of wide geographical area, should present the beginnings and backgrounds of American crafts. Certainly a future forum will be limited to life in the Midwest, even if that circumscribes time to the nineteenth century.

Probably the best opportunity to unite the Midwest with the whole picture of Americana came in the glass category. Brilliant specimens of Stiegel, Jersey, Amelung, and Sandwich were shown, but Midwestern glass dominated. A magnificent amber ribbed sugar bowl from Zanesville, a unique three-mold blown green Kent bowl, and many pieces of pattern-molded Ohio and Pittsburgh glass bettered even the Stiegel tradition.

Mr. Innes, headmaster emeritus of Shady Side Academy, now enjoying retirement with Mrs. Innes in their native Maine, was one of the lecturers at the Midwest Antiques Forum. He is now expanding into a book his catalogue that was published in 1949 by Carnegie Museum for the exhibition of Early Glass of the Pittsburgh District at the Museum.

Also recapturing the Midwest were a genre painting by David Blythe, Currier and Ives prints, woodenware and iron farm tools, pewter from Cincinnati, early lighting devices, and handwoven quilts. There was just enough pottery from the Ohio valley to bespeak what a fruitful and rewarding field the collecting of our stoneware can be. Buffalo Bill's carbine and Marshall Tilgman's finely engraved Colt 45 gave evidence of pioneer life in the expanding West.

The exhibition, *COLLECTING AMERICANA*, combined with the Forum to make the whole achievement a tour de force. Ford Museum and Greenfield Village were a perfect setting for comparative study. The February, 1958, issue of *Antiques* magazine, devoted entirely to the Ford collections, shows what a rich field exists.

The daily schedule consisted of two solid lectures in the morning, afternoon study in the Museum, and an informal panel before dinner. For variety, members of the Forum (61 were present for five days, with 263 transients) were welcomed to the homes of Mr. and Mrs. Adolph Meyer and Mr. and Mrs. James O. Keene, where they saw finest antique American furniture fitted into daily living. One evening the assistant concertmaster of the Detroit Symphony, Gordon Staples, demonstrated five violins from the Ford collection: two Stradivari, a Bergonzi, a Guarnerius, and a Guadagnini. At the final banquet the chief curator of the Museum, Minor Wine Thomas, traced the history of music boxes, using entertaining examples from the Ford collection.

Any forum taken seriously becomes a



Engravings courtesy Henry Ford Museum

PITTSBURGH AND MIDWESTERN GLASS

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rigorous experience. Collectors in specialized fields here found enthusiasm for new areas; they saw values in other fields of study and collecting, and sensed new artistic and craft relationships. Best of all, however, came the strong conviction, effectively demonstrated, that the Midwest has as much of a stake in Americana as has the East Coast. Inevitably, also, Forum members left with enriched perceptions, carrying with them the everlasting challenge that collectors need to study hard, and that an appreciation of beauty in American crafts comes only after close association with many examples.

HOPI INDIAN DANCES

ARTS and crafts, dances and ceremonials of the Hopi Indians will be presented in Carnegie Music Hall on Saturday, February 11. Two hour-long performances will be

given on the stage at 1:30 and 3:00 P.M.

The program is offered without charge for school children and teachers of the City of Pittsburgh and County of Allegheny.

A color-sound motion picture of Hopi ceremonial group dances taken on location will first be shown.

Next follows an exhibit of arts and crafts that has been presented at the Smithsonian Institution in Washington, D. C.

And finally, Sewehoongka will perform in costume the esoteric Hopi ceremonial dances in which she has been trained since infancy in the Hopi kivas.

The program—authentic, with historical, educational, and entertainment value—is conducted under personal management of M. W. Billingsley.

The Hopi Indians appear in Pittsburgh under sponsorship of the Division of Education in cooperation with Mr. and Mrs. Henry J. Heinz II.



CALL OF THE WILD

MUSKOX
(*Ovibos moschatus*)

Although a now extinct muskox roamed the eastern United States during the frigid days of the Pleistocene Ice Age, thousands of years ago, this warmly upholstered relative is found only in Greenland and northern Canada, where the few remaining herds are rigorously protected.

Each adult female has one calf, rarely twins, every other year. Those that survive in the cold and windswept Arctic tundra reach adult size in five or six years and weigh six to seven hundred pounds. During

the short summers muskoxen graze like domestic cattle, but winter forces them to paw through the snow for moss, lichens, and natural hay.

When attacked, the herd forms a circle, calves within, cows and bulls with lowered heads facing the intruder. Such a defense, although effective against wolves and bears, is useless against a man with a gun. Few animals are less suited to elude the hunter.

This male specimen from Arctic America collected and presented by George Dippie.



MANDRILL (*Mandrillus sphinx*)

Peculiar monkeys, with long, doglike muzzles and almost no tail, mandrills roam the forests of tropical West Africa. Rarely if ever ascending trees, they live in rocky outcrops and comb the surrounding countryside for food—fruits, berries, insects, eggs, lizards, vegetables—searching through every rotten log and under every stone.

The adult males are among the gaudiest of all mammals with their red and blue faces and scarlet buttocks. They know it, too, and will put on a vivid display of bluff and intimidation, backed up by dagger-like canine teeth, calculated to repel all intruders.

This male specimen from an unknown locality was presented to the Museum by the Pittsburgh Zoological Garden.

IBEX (*Capra ibex ibex*)

Timberline, high in the Italian Alps, is a world of rock-edged sky, of hardy, wind-seared plants, and of Ibex.

This wild goat has fought its battle for survival for over four hundred years—it became extinct in some parts of the Swiss Alps as early as 1540. Hunted until it came as close to extermination as did our American buffalo, only timely conservation practices saved the remnants from oblivion. Today it has been widely reintroduced into many sections of the Alps, and its numbers are increasing.

With habits similar to our native mountain sheep, the European Ibex is nonetheless a true billy goat, a free-living mountaineer whose horns may approach a sweeping four feet in length. The Ibex (*Steinbock* to the Bavarians) crosses freely with domestic goats, and this fine species may yet become extinct through interbreeding.

This male specimen came from Montedì Roma Camavese (Valle d'Aosta), Italy.





Persian Astrolabe
Purchased in Paris, 1888
by S. P. Langley

Courtesy
Smithsonian Institution




Shooting the stars

Man has always set his sights by the stars. There is something about "looking up" that has always stimulated his imagination, caused him to make great strides ahead.

Ancient man probably had no idea what stars really were—but he did know that certain stars appeared in the heavens at certain times of night and year, and that by setting his sights on these stars, he could usually find his way across land or sea.

In the "age of discovery," when Columbus, Balboa, de Gama and Magellan were off to conquer the unknown, they were aided by an interesting instrument called the *astrolabe*. The astrolabe was a graduated circle, usually of metal, with sights down which the navigator could roughly measure the angle between the horizon and known stars. The face of the astrolabe, frequently a beautiful work of art, contained a map of the sky as the astronomer figured it would appear if he were to look straight through the North Pole. In addition, the metal was incised with the degrees of a circle, plus whatever other markings would be of help in shooting the stars more accurately.

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THE LEOPARD

A review of the novel by Giuseppe di Lampedusa

SOLOMON B. FREEHOF

WALTER PATER and his pupil Oscar Wilde would say that art is only for art's sake, but John Ruskin, their great contemporary, would say that art is for life's sake. Our modern pictorial art tends to follow Pater and is art for art's sake; our modern literary art tends to follow Ruskin and seeks to be art for life's sake. In fact, novels always were "for life's sake." In the time of our grandmothers, many children were named after characters in books. It is obvious that when a young mother years ago read a certain novel, she not only looked upon the chief character as a literary fiction but as the embodiment of an ideal she hoped her child would attain as he grew up. She was interested in art for life's sake. Mother and grandmother were "Ruskinites."

If we should ask John Ruskin what sort of novels should be written nowadays, he would ask us to think of the needs of our day. What do the human mind and spirit hunger for; what do they lack? Today we are living in an unsettled period. One world crisis follows another. We need constantly to readjust our estimates and emotional relationship to the events occurring in rapid succession around us. It is a period of dynamic history.

Dr. Freehof's article is excerpted from one of the book reviews in his autumn series for the public at the Temple Rodef Shalom. He has been rabbi at the Temple since 1934 and is now serving as president of the World Union for Progressive Judaism. Dr. Freehof himself is author of a number of books, among them *Commentary on the Book of Psalms*, *The Small Sanctuary*, and *Book of Job*.

Perhaps, therefore, the sort of novel we should be interested in and need, and which would help us most, would be the historical novel; for we note that in historical novels the author, by proper instinct, never selects a lethargic time but always a dynamic one. One author will deal with the transition from pagan Rome to Christian Rome, or perhaps the excitements of the Renaissance, or the grand adventures of the Crusades. Historical novels are always set against the background of exciting periods of change in the story of man.

Hence a good historical novel can be beneficial. Whatever the specific story is, its total effect is to say to us: You are living in a period of change today. You are wondering what is going to happen. Are you, perhaps, apprehensive? Remember, then, that mankind has faced periods of drastic changes time and time again and has lived through them. Certainly there is general reassurance in the historical novel.

Also, most of the historical novels involve travel to some exciting "trouble spot." An English lad goes on a Crusade. A traveler from North Europe comes to Venice or to Florence in the time of the Renaissance and shares the excitement of the career of the monk Savonarola. The hero is always going away from home to the center of the scene of the world's excitement.

This classic knight-errantry of the historical novel must be dealt with differently nowadays. The hero does not need to travel far. The excitement and the dangers of our world have come to us. Part of the tension of our life is that unsought adventure is now

potentially everywhere. Danger is worldwide. The bold young son of the family does not need to take ship and go where the excitement is. The excitement comes to the family at home. The whole family has become the "hero," and the novelist's question is: how are father and mother and older and younger brothers and sisters facing the excitement of the world that now comes to their doorstep?

So we need, also, a family novel in which the individual emotions and the interindividual reactions are dissected and described. Actually, we ought to have a type of novel we have not had before: a combination of historical and the family novel. This combination has, as far as I remember, been produced for the first time in the novel *The Leopard* by Giuseppe di Lampedusa. The leopard is the symbol on the coat of arms of the princely family of the Salinas.

The author himself is of special interest. He was a nobleman (he died a few years ago) of an old family in Sicily; a man of general culture, too, not immersed in the self-indulgence his position would allow him. He married a Baltic noblewoman and spent a good deal of his life in England and in Paris. He had a sort of literary circle in his palace in Sicily—in Palermo, I believe. He wrote this book, which was rejected by many publishers in his lifetime; but after he died, some publisher discovered it, and it is now a best seller in six languages.

The scene is the island of Sicily. This in itself is noteworthy, because one of the aims in historical novels is to look for new scenes and events. The famous periods of great change—the Renaissance, the Crusades, the change from pagan to Christian Rome—have all been used in historical novels and have all become hackneyed. This is the first time Sicily has been used; and Sicily is an interesting scene because that triangular

island is right in the middle of the Mediterranean, the sea around which all the ancient civilizations were set, back to the days of Egypt.

Sicily lived under many regimes. It belonged to Carthage, then to Rome, then to the Arabs, then to Byzantine Rome; then the Normans came through the Straits of Gibraltar; and then the Spaniards, and finally, in the modern age, came the Bourbons. Thus this many-storied island has residues of almost all the civilizations of antiquity. The island was always conquered. The people, always vassals, learned the art of concealing themselves from the too-efficient control of their successive masters.

The Leopard, a historical-family novel, is set in Sicily at an interesting time, the year 1860. It was the time of the great Italian adventurer-hero Garibaldi, that remarkable man who fought in South America, in France, in Italy, and was almost never defeated. He, however, appears only in the background.

The book is primarily the story of the ancient noble family of Salina, which had been dominant all through Sicilian history; and now this Salina family faces another period of social change. The question is, will the Italian nationalism of which Garibaldi is the spearhead, this new revolution, be more powerful in its effects than all the innumerable earlier changes? Will the Salina family, the symbol of whatever stability there is in Sicily, continue to outlive political revolution?

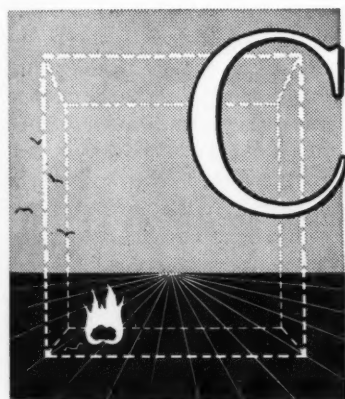
The present head of the family is Don Fabrizio, a blond giant of a man. (His mother was a German noblewoman.) There are his daughters, of whom the important one is Concetta; and his favorite nephew Tancredi, who might be considered the second hero of the book: a clever young man, satiric, life-loving and adaptable,

whom his uncle Don Fabrizio loves above his own family because he recognizes in the clever agility of his charming nephew the possible type of person who will help the Salinas outlive the new time of change.

Don Fabrizio himself is also an unusual person. He is still the old feudal master, still catering to his own pleasures, having a formal relationship to the Church, which is still powerful and apparently unshakable in Sicily. Nevertheless, he is the first of his line to have a strong intellectual interest: he is a competent astronomer. In fact, some of his formulas describing the satellites of Jupiter have been awarded a gold medal at an astronomer's meeting in Paris. It is as if, in his astronomy, he were looking for something changeless and eternal in the life that he now senses is becoming dangerously changeable and transient.

The novel begins in the chief palace of the Salina family on one of the mountains that surround the capital city of Palermo in Sicily. The Jesuit priest who is the family chaplain, Father Pereti, is conducting the rosary half-hour, but under strange surroundings. The palace is all pagan. Its painted and sculptured, half-naked pagan goddesses, even in the terrazzo on the floor, mock, as it were, the reverent Christian half-hour of the rosary time.

The moment worship is over, paganism takes control of the palace for twenty-three and a half hours of the day. The great Dane Bendico, the favorite dog of Don Fabrizio, scratching at the door, is admitted and comes bounding in like a young colt. Then Don Fabrizio takes a walk in his garden. Beautiful plants have been brought from various climes; and in the lush, extreme



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Sicilian climate, they grow wild and unruly, unrecognizable by the horticulturists who developed them. Their scent becomes heavy and overwhelming. Don Fabrizio walks through the garden with his dog as though he were walking through a jungle. The smell is overpowering, wild perfumes fight each other. Don Fabrizio says it is a garden for the blind—a symbol, implying that one gropes and stumbles among the wild lushness of the age.

Don Fabrizio comes back into the palace and his nephew Tancredi enters. They talk playfully. Tancredi answers with a young man's lovable impudence. He asks Tancredi where he is going, what he is going to do today.

Tancredi says: "Those campfires we see all around the palace, around Palermo—do you know who are sitting around them? You call them brigands, but they are Garibaldi's revolutionaries, and I am going out there to join them."

Don Fabrizio asks him why, and the clever Tancredi says, "Unless we join them, we cannot use them; and if we do not join them, they will create some foolish republic. I am going to be part of this movement."

Don Fabrizio understands that his clever nephew is going to use the new movement and rise with it. As Tancredi is about to leave, Don Fabrizio goes to his dresser drawer, opens it, and pulls out a roll of gold pieces that he gives to him.

The next day he talks with his steward. He knows that the steward is systematically robbing him. It is always taken for granted that the steward will rob him; but as long as the robbing is within a certain limit, it is ignored. The Salinas are rich enough that they do not have to bother about money matters. Don Fabrizio keeps up appearances and makes the effort to talk about the income from his various estates all over Sicily.

After that task is done, they talk a little more frankly. It seems the steward is likewise in contact with the brigands and with Garibaldi. The steward and Don Fabrizio talk very delicately, cleverly. Finally the steward assures him that, when the change comes, the Salina family will be safe, their palaces not interfered with. The only change will be that new men will have a chance to rise to the top.

The Garibaldians capture Palermo, and, as the steward had predicted, the conquerors are polite with the family and nothing is really disturbed. Time passes, and Garibaldi's victory is absorbed by the King of Piedmont for the purpose of uniting Sicily with the rest of Italy into one nation. (The King of Piedmont and Sardinia was the ancestor of former King Victor Emmanuel III of Italy.) Tancredi, the young nobleman, now becomes a captain in the new Italian army and marries Angelica, the beautiful daughter of the newly rich bourgeois. Concetta, the young princess who had loved him, becomes absorbed into religious life.

The story moves rapidly through the years. Garibaldi vanishes. Italy is firmly established as one kingdom. Tancredi rises, and ends as an ambassador to Vienna. And Don Fabrizio, the giant, is approaching the end of his long life. As he lies dying in a hotel, Tancredi, now a very important person, comes to see him. Don Fabrizio realizes through the haze of dying that Tancredi loves him, possibly the only person this clever manipulator ever really loved.

Don Fabrizio hears the voice of his daughter Concetta, now middle-aged, insisting upon bringing a priest. The priest comes, but Don Fabrizio has nothing to confess. He thinks, "What can I confess? Either my whole life is sinful—which in a way it was—or my sins are not important after all."

Dying, his final vision is of the skies. The

immortal goddess Venus from the eternal stars comes to lead him into infinity.

The story could well end there, but it does not, because the author wants to show what the family life is after the old leopard has gone.

The essential problem of the story is, how does a great family face historic change? The answer given is that the family does not face it as a family, even in a well-organized family such as that of the ancient aristocracy.

Each member of the family faces it according to his temperament. Concetta, faced with a bewildering emotional disappointment, fled to the protection of the Church. Her father fled to the stars. But her father's flight was only part of his life. It was his hobby. His real life was dealing with the people and the estates. He resisted the times as well as he could—stood firm whenever he could, yielded whenever he had to but only

when he had to. Tancredi acted differently. He was the manipulator. How cleverly he used all the patriotism, all the excitement, all the new opportunity and wealth of the new money-makers to further his career and enhance his status.

So each one acted differently: Concetta like the lost sheep, Tancredi like the clever fox, and Don Fabrizio, the head of the family, gallant, doomed to defeat, but strong to the last—the defiant leopard.

COLOPHON

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The world's biggest radio telescope

This is an artist's concept of the world's biggest radio telescope. This giant telescope will use radio waves to locate objects that are billions of light years out in space. The dish-shaped mirror will be 600 feet in diameter—about the size of Yankee Stadium. It will be the biggest movable radio telescope the world has ever known.

As you'd imagine, it is going to take a lot of material to build an instrument this size. The American Bridge Division of United States Steel, as a major subcontractor, is fabricating and erecting 20,000 tons of structural steel for the framework alone. The U. S. Navy, through the prime contractor, is supervising the entire job. When it's completed, there'll be a power

plant, office buildings and personnel facilities for a permanent 500-man crew. The site is near Sugar Grove, West Virginia.

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HOW'S YOUR FAMILY DOING?

FAMILY life may not always be paradise, but it can bring plenty of earthly renown.

Even since the days of Noah and his three sons, sixteen grandchildren, and fifty-four great-grandchildren, some families have been chalking up collective honors for their size, prosperity, talents, or accomplishments, while others have hit the history books and the headlines for their misfortune or misbehavior.

Some famous clans, though, may be famous for the wrong reasons.

If the Barrymores make you think of drama and the Hatfields of the McCoys, you're right.

But if the Borgias, who ruled Rome in the fifteenth century, make you think of poison—as they do most people—then you're probably wrong.

They were hardly a well-behaved lot by today's standards, but neither were many people in Renaissance Italy. And, modern historians say, they certainly did not make a practice of poisoning an enemy every morning before breakfast. In fact, Lucrezia, who has come down in popular tradition as the most venomous of the lot, was a very nice girl.

How did the Borgias get their sinister reputation?

Nobody knows for sure. But they were disliked by many Romans simply because they were foreigners from Spain, and it would have been easy enough for their political foes to start dark rumors circulating around Rome of their knowledge of the poisons of the Spanish Moors. And the fact is that one Borgia, Rodrigo, became Pope Alexander VI! Another was canonized as St. Francis Borgia!

In just about every field of human endeavor, there's been at least one family of outstanding achievement.

In music, the family name is Bach.

When Johann Sebastian Bach was born in 1685, his family had dominated the musical life of the German town of Eisenach for five generations. They had supplied so many organists, choirmasters, and singers that all musicians in Eisenach were jokingly called "Bachs." And three of the great Johann Sebastian's sons carried the family tradition on into the seventh generation.

In literature there are the Brontës, in baseball the DiMaggios, in finance and philanthropy the Rockefellers, and in comedy the Marxes—Chico, Groucho, Harpo, Gummo, and Zeppo. And so it goes.

While the members of some famous families have pursued their parallel careers separately, others have cashed in on togetherness.

For instance, there's the Trapp family. When Baron and Baroness von Trapp fled from Hitler's Austria to the United States in the 1930's, leaving their money behind, they taught their seven sons and three daughters madrigals and folk songs, and sang their way to fame and fortune. The family choir broke up when the children began to marry and have families of their own, and today the Baron and Baroness have retired to a farm in Vermont, but their story is being sung on Broadway in Rodgers and Hammerstein's *The Sound of Music*.

A family business often makes its owners' name synonymous with a fine product. Look at the Fords. Or the Myers, who went into the Jamaica rum business way back in 1879, and have handed down secrets of blending or "marrying" rums four generations.

And then there are families who've won their fame by getting into trouble.

Generations of college students in psychology, sociology, and genetics classes have learned about those awful examples of bad heredity, the Jukeses and the Kallikaks.

The Jukes family was written up by a New York criminologist, Richard L. Dugdale, in 1874, and reported to have a seven-generation history of crime, pauperism, disease, insanity, and just plain stupidity.

The Kallikaks, on the other hand, were divided by their chronicler, Henry H. Goddard, into two clans, the good ones and the bad ones. A Revolutionary War soldier, Martin Kallikak, was the patriarch of both. He and his first wife, who was feeble-minded, had a ne'er-do-well son, who in turn became the father of ten more ne'er-do-wells, from whom generations of ne'er-do-well Kallikaks descended. Next time, the

story goes, old Martin did better and married a young woman of high intelligence, and from this union came generations of prosperous and prominent citizens.

Practically everybody, of course, knows about the feuding Hatfields and McCoy's. But few people could tell you what really started the backwoods vendetta—or what ended it.

The two families lived across a narrow creek from each other, but the Hatfield side was in West Virginia and the McCoy side in Kentucky.

This geographical accident was partially responsible for the beginning of the feud, since it put the McCoy's on the Northern side in the Civil War and the Hatfields on the Southern. Not even the Romeo-and-Juliet romance of Anse Hatfield and Rose Anne McCoy could stop them. Years later, when the law stepped in to stop the shoot-

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DAGUERREOTYPE NO. 1 BY JACQUES VILLON (1950)
Purchased through Leisser Art Fund for Carnegie Institute Collection

ing, it was to create such bitter feeling between the two states that they actually prepared to send troops against each other.

The feud guns weren't stacked until 1899, when old "Devil Anse" Hatfield and those of his sons who had survived got religion, were baptized, and made peace with their enemies.

Since then, the Hatfields and the McCoy's have produced doctors, lawyers, and even a United States Senator. The younger generations of both families, still living in the Kentucky-West Virginia border region, are, by and large, getting along fine.

Nobody believes it, though. As late as 1947, when a McCoy, trying to interfere with the arrest of a friend, was shot by the local police chief, who happened to be a Hatfield, headline writers from coast to coast gleefully proclaimed the reopening of the feud.

Royal families, of course, get the most space in the history books—especially if they stay around for a few centuries; like the Capets, who held the throne of France from 987, when Hugh Capet founded the dynasty, to 1789, when Louis XVI lost his head in the French Revolution.

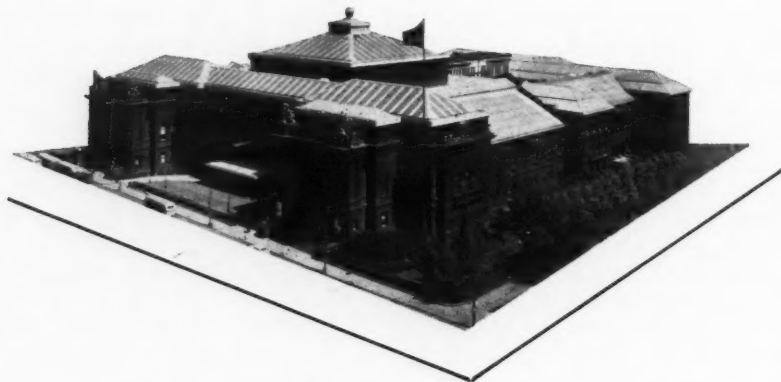
The family names of living sovereigns tend to be forgotten, since nobody calls a king or queen Mr. or Mrs. So-and-so.

Did you know, for instance, that the British royal family recently changed its name? Queen Elizabeth II has added the family name of her husband, Prince Philip, to that of her own House of Windsor—and when their son, Prince Charles, becomes King of England, he'll be the first of the new House of Mountbatten-Windsor.

Even though we don't have royal dynasties in the United States, we have families

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OF INTEREST TO OUR FRIENDS



VISITORS to Carnegie Institute who stroll through Sculpture Court these days will immediately notice large black exhibit cases being installed at both sides of the Court. These run between the Pentelic marble columns and the walls and are to contain representative examples from the various permanent collections of the Section of Decorative Arts, which will be installed by Herbert Weissberger, curator, during the coming months. The cases have been especially designed by Paul Schweikher, head of architecture at Carnegie Institute of Technology, and are made possible through a gift from the Sarah Mellon Scaife Foundation. The Section of Decorative Arts was established through the generosity of Mrs. Scaife in 1955, and now moves to a more spacious, more accessible area.

The balcony above Sculpture Court, now vacated by Decorative Arts, will be given over to changing exhibits of drawings, prints, and watercolors selected from the Institute permanent collection, space for which has been badly needed for many years.

Decorative Arts storage has been moved

from a partitioned-off part of gallery C, second floor, to a new, larger room in the basement with its own wide doorway opening on the court and allowing for direct delivery and pick-up of materials arriving by van or truck.

Similarly larger storage space has been made available in the basement for building-maintenance supplies. Also, all machinists and heating and ventilating men have been moved away from the carpentry shop into a separate large area with all their facilities and equipment brought together.

Another nearby area of the basement, redecorated and well lighted, has likewise been put to improved use for the Schools Department of Carnegie Library of Pittsburgh. Bookshelves increasing the space heretofore available for the Department have been installed in this newly available room. Schools Department is constantly shipping out books to the more than one hundred Pittsburgh public school libraries because of a contract for cataloguing, re-binding, and request service.

Order and Catalogue sections of the Li-

brary share this space under a revised system for processing books. Often forty or fifty copies of a popular new book are bought by the Library, and the duplicate copies are now stored in this basement area while a single copy is being handled by the Order and Catalogue offices on the second floor.

All this additional space was made available by construction of an additional floor in the former high-ceilinged engine room in the basement. This engine room, housing the engines and direct-current generators, became obsolete and unnecessary when the electrical system was altered to provide for the purchase of alternating current from the local utility instead of producing our own direct current.

And now as to the plumbing—nonesthetic but very essential. The Building Rehabilitation Fund (1955-56), which made possible replacement of the roof of Carnegie Library and Institute and also conversion from direct electric current to alternating current, is also bringing about renovation of the public and semi-public lavatories scattered through the building. Six have been completed and

a dozen more remain. This means modernization of plumbing equipment including new copper and soil pipes, and new vitreous china fixtures with chromium-plated brass fittings that enable the janitors to keep these areas clean with less effort. Mosaic glazed tile for walls and nonslip unglazed tile for floors make the lavatories attractive, as does the new wall-to-wall lighting.

The spotlight of publicity fell on Hobby Hall last month, with its exhibit of dolls representing presidents of the United States and their first ladies. Now established in the 167-foot corridor connecting the Fine Arts galleries and Museum on the third floor, Hobby Hall will provide opportunity for display of a wide variety of hobby collections in the future. Transportation Hall is also to be installed in this corridor later.

HOW'S YOUR FAMILY DOING?

[Continued from page 67]

who have shone in public life through several generations.

Perhaps the most distinguished family of statesmen in our history are the Adamses, who in three generations produced two presidents, John and John Quincy, and a diplomat, Charles Francis, who may have rendered greater service to his country during the Civil War, as Minister to England, than anyone but President Lincoln. The fourth generation Adams, Henry, was one of America's most distinguished writers.

And in our own century, two branches of one family have each come up with a president—Republican Teddy Roosevelt from Oyster Bay, and Democrat F.D.R. from Hyde Park.

The roster of famous families is a long one. Nobody knows what new family names will be famous a hundred years from now. One of them could be yours . . . couldn't it?

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